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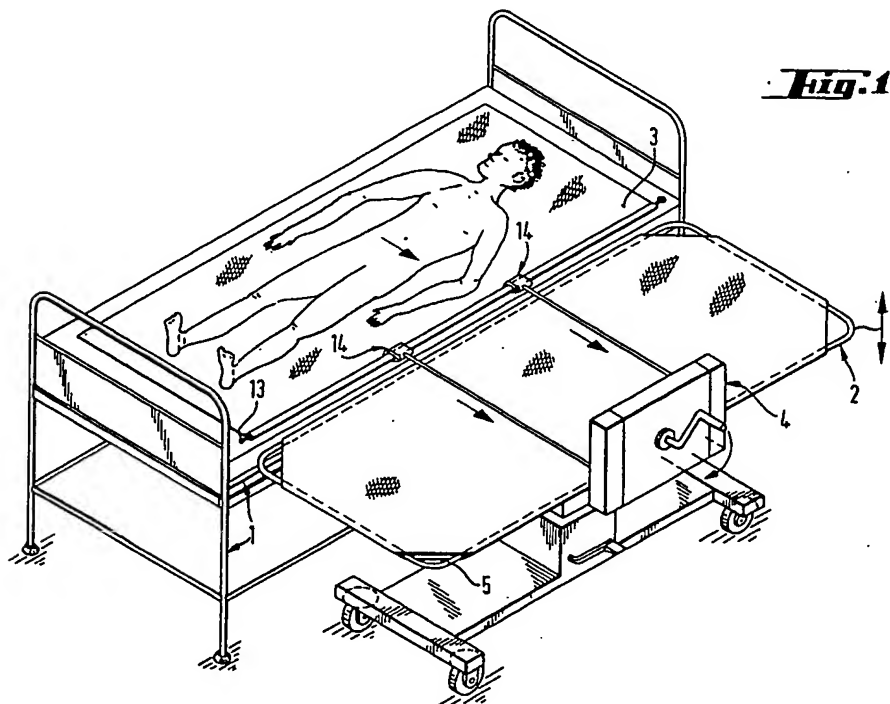
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(54) A transferring device for a patient

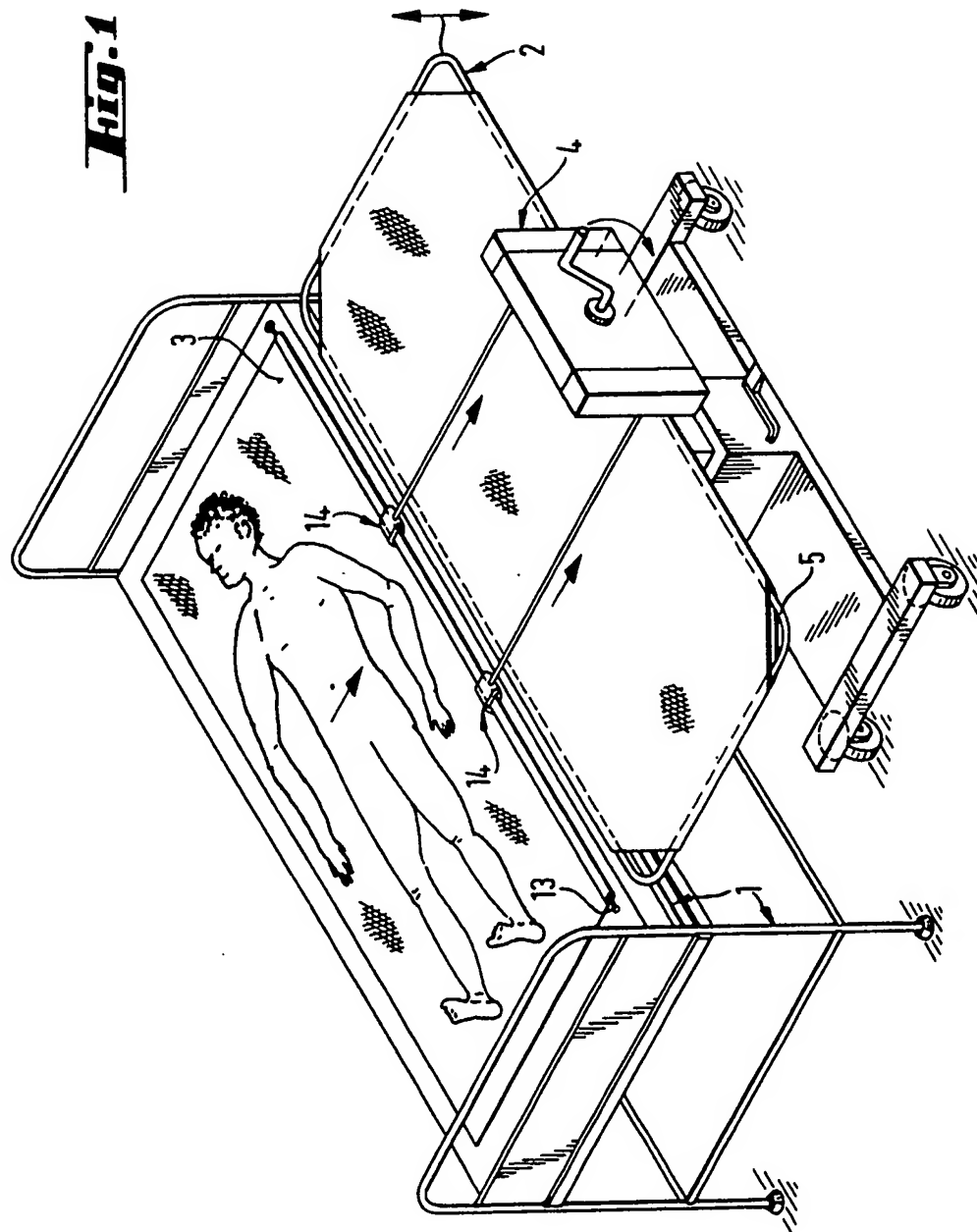
(57) A device (4) for transferring a patient from a bed (1) or like support to another support, e.g. transfer carriage (2), or vice versa, using the sheet (3) of the patient's bed as transferring support, or a support designed for transfer has an engaging member (14) which connects with a rod (13) about which the transferring support (3) is wound, passed or otherwise fixed. Strings or cables extend between the transferring device and the engaging member (14) and which pull the latter to transfer the patient on the transfer support from one support to another.



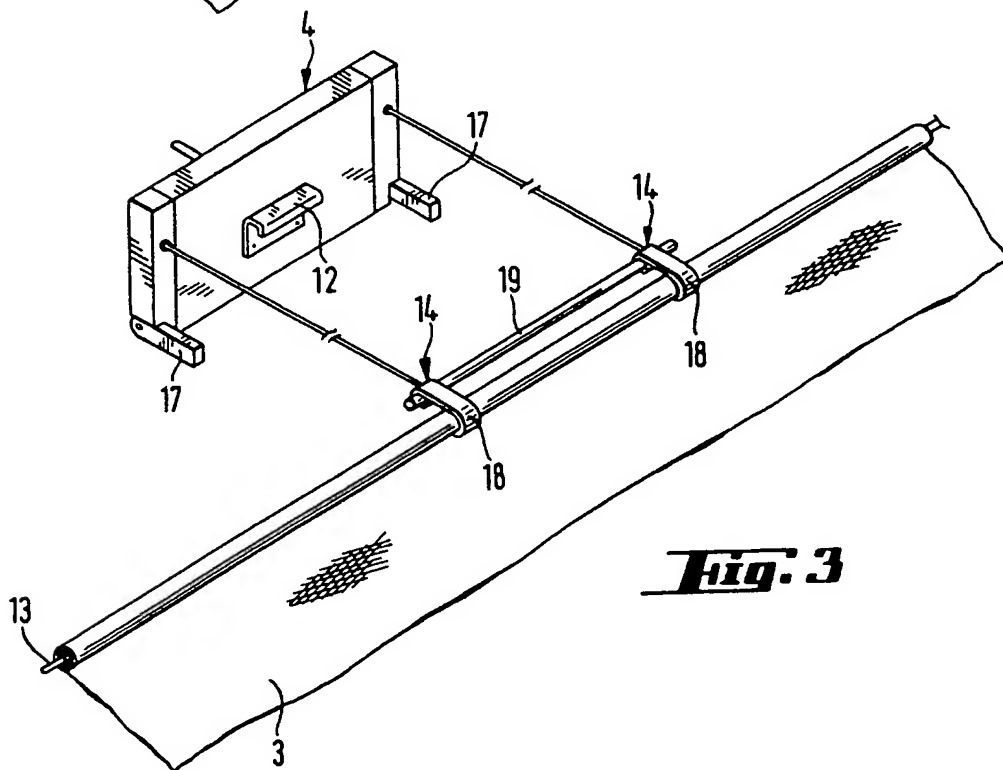
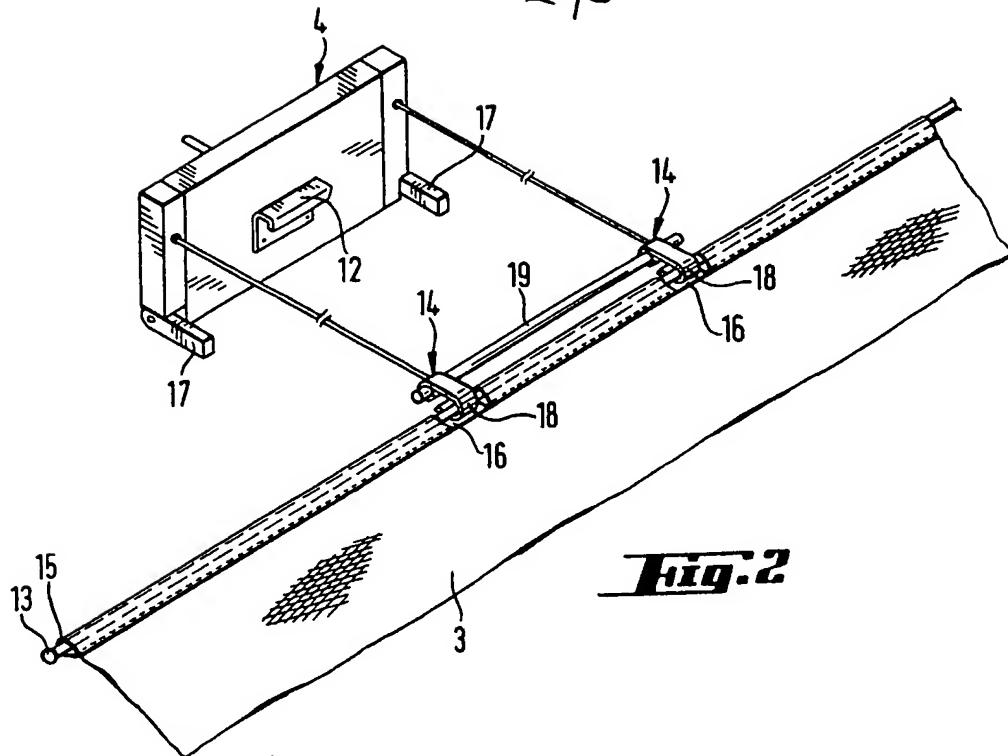
The drawings originally filed were informal and the print here reproduced is taken from a later filed formal copy.

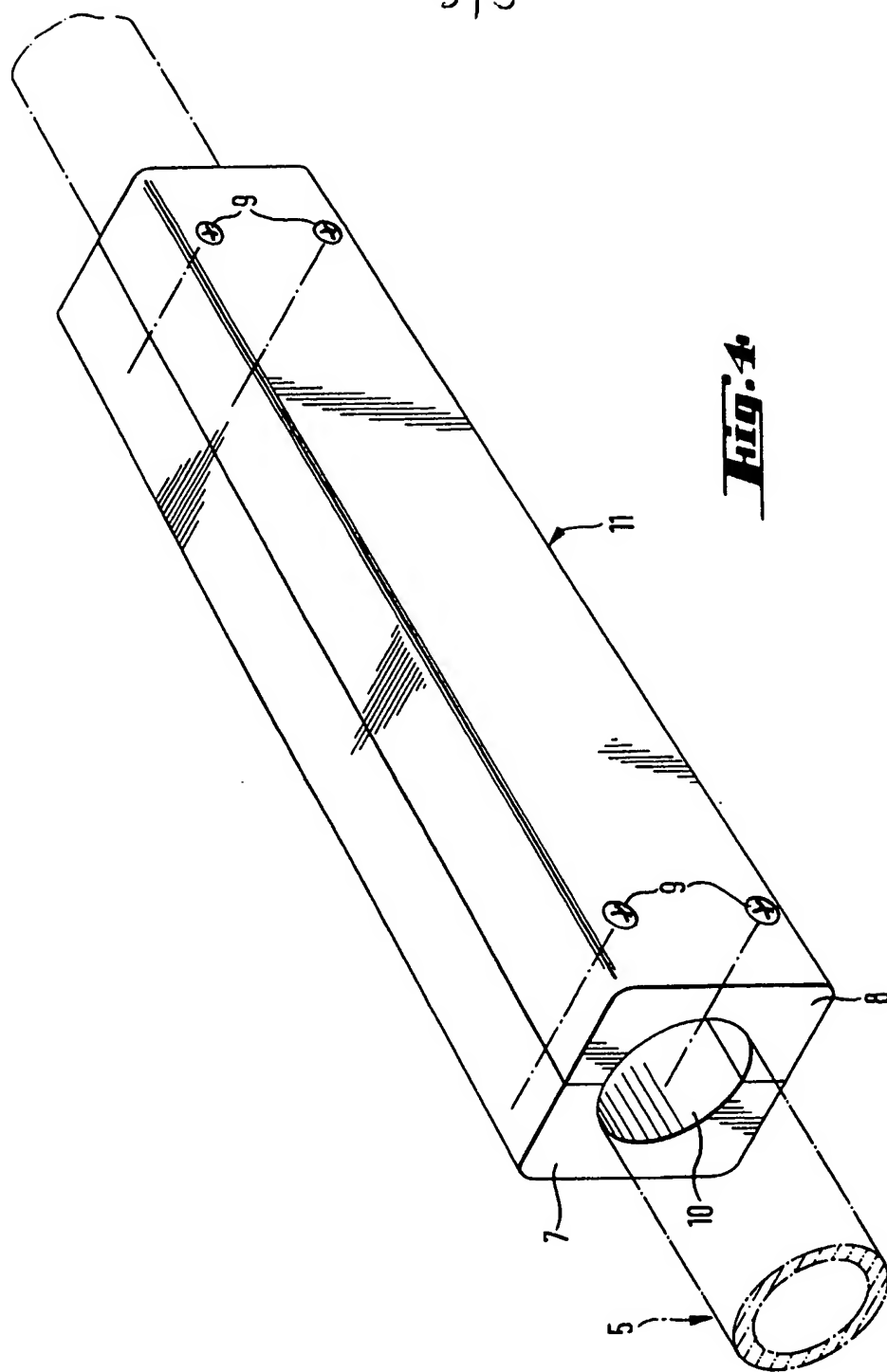
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SPECIFICATION

A transferring device for a patient

The invention concerns a device for transferring incapacitated persons from a bed like support to another.

Transferring an incapacitated patient from the bed on a transport support constitutes a frequently existing problem in hospitals and asylums. In practice, the auxiliary devices mostly used are different levers which have turned out to be inconvenient. Also for lateral transfer of a patient, several devices are developed. The problem here is to obtain a suitable transferring device between the incapacitated patient and the mattress, without causing pain to the patient. In the U.S. Patent 2665 432 a method is presented, however, according to which reinforced cloth or canvas is used under the patient to serve as a transferring support. But the device being used is a large size in the form presented, and very inconvenient to handle, requiring several persons for transferring the device from one working object to another.

According to the present invention there is provided a device for the transfer of a patient from one support to another using a sheet of the patient's support as a transferring support or a support designed for transfer, the transferring device comprising an engaging member which pulls a rod about which the transferring support or a sheet serving as such, is wound, passed or otherwise secured.

The device includes a transferring arrangement, engaging means for the same, and a transferring support. For the transporting support, a support separately designed for this purpose may be used, or a bed sheet used by the patient. The support is pulled by means of the transferring device which engages the edge of another bed like support, and the sheet or the transferring support is engaged by means of a supporting rod and a pull unit.

The device according to the invention permits transferring the patient from the bed or other resting support to another, for instance to the operating table and a variety of seating arrangements very conveniently compared to devices generally used. In comparison with the device according to the U.S. Patent 2665 432, the device according to the invention is exceedingly more handy in operation to the end that the care-taker hardly without stress, is able to transfer it whenever necessary to any point of use when the object of care is changing.

The method according to the invention is mainly characterized in that the engaging means of the transferring device pulls a rod about which the transferring support, or the sheet functioning as such, is wound, passed or otherwise secured.

The device may for example be used to transfer a patient from the bed to a transfer carriage, or vice versa, using the sheet of the patient's bed as transferring support, or in particular a support designed for transfer, as well as detachably to the support onto which the patient is transferred.

The device according to the invention includes

a transferring device, a support, and means of engagement in the bed as well as the resting support.

The invention will now be described further hereinbelow, by way of example only, with reference to the accompanying drawings; in which:—

Fig. 1 shows one mode of application of the invention in engagement with a transfer carriage for transferring the patient from the bed to the carriage.

Fig. 2 shows the device according to the invention in using a separate transferring support.

Fig. 3 presents the device according to the invention in using a sheet as a transferring support.

Fig. 4 presents a bed engaging member of the device.

Fig. 1 shows an incapacitated patient lying in bed (1). Beside the bed (1) is a care table (2) which is vertically adjustable, and onto which the patient is to be transferred.

The patient transferring device (4) is fastened to the edge of the care table (2), either into fastening holes in the sides, or by separate fasteners. When using the patient's sheet (3) as a transferring support the edges of the sheet (3) are detached from under the mattress, and the edge near the care table is wound a few times about a rod (13). An engaging member (14) is secured or fastened to the rod (13) surrounded by the sheet (3). The engaging member consists of 2 hooks (18) with a pipe (19) inbetween, its length being 400—800 mm.

The height of the care table is adjusted to be somewhat lower than the height of the bed. The engaging member (14) is coupled to the transferring device by strings or cables. A motor of the transferring device, or in the case of a hand-driven transferring device, a hand-crank is used for effecting transfer. The strings or cables of the transferring device pull the engaging member (14) and hence the rod (13), the sheet (3), and the patient toward the transferring device and onto the care table (2) or other support onto which the patient is to be transferred.

The transfer of the patient from the care-taking support, or the like, takes place in a corresponding manner. The transferring device then is naturally positioned on/fastened to the edge of the bed.

For transferring a patient a separate support (3) may also be used as a support. Tube-like loops (15) are formed along at least one edge, for example by sewing and into which tubes the rod (13) will be pushed. The tubes are provided with openings (16) to enable the engaging member (14) to engage the rod (13). If necessary, the tube may consist of two parts, the rod then being bare at the middle.

For engaging the transferring device with the above presented hospital furnishings and devices, the transferring device is provided with a fastening member (12), or turnable tabs (17). A fixing piece consisting of two longish pieces (7, 8) may be attached to an edge pipe of the mentioned

furnishings and devices. This fixing piece is fastened to the edge pipe by means of, for example, brackets or screws (9), so that the inside opening (10) corresponds to the edge pipe, and the outer side becomes rectangular in shape, one of the fixing pieces being secured to the transfer device (4). In order to facilitate transport, the fastening rod (13) is preferably made telescope-like or bendable/foldable so as to obtain a length of 120—200 cm in its open position.

In tests performed the transferring device presented above has turned out to be extremely gentle from the patient's point of view compared to other conventional devices in use. The patient's sense of security is clearly better, on account of the patient all the time being in contact with the underlying support.

Due to the circumstance that the transfer device is pressing against both supports, the operating table and the bed, no fastening system whatsoever has been needed in the performed tests between them, but if needed of course, they can be locked together for the time of transfer.

If called for, the sheet used in transfer may be removed, and replaced by a new one, easily by turning the patient first in one direction and then in the other.

The invention is not restricted entirely to the details presented above, in particular not as far as transferring supports are concerned, and it can be applied for all transferring situations, where the patient can be brought in just about horizontal position, and in exceptional cases even in sitting position.

CLAIMS

1. A device for the transfer of a patient from one support to another using a sheet of the patient's support as a transferring support or a

support designed for transfer, the transferring device comprising an engaging member which pulls a rod about which the transferring support or a sheet serving as such, is wound, passed or otherwise secured.

2. A device as claimed in claim 1, in which the engaging member consists of two hooks, and a frame inbetween, which is floatingly fastened to a pull string.

3. A device as claimed in claim 2, in which the hooks of the engaging member are 400—800 mm apart from one another.

4. A device as claimed in claim 1, in which the edge or edges of the transferring support are turned to tubes.

5. A device as claimed in claim 4, in which the tube is provided with openings for fastening hooks.

6. A device as claimed in any preceding claim, in which the rod is telescopic or bendable.

7. A device as claimed in any preceding claim, in that the length of the rod is 120—200 cm in open position.

8. A device as claimed in any preceding claim, in which a fastening element is mounted to the frame of the support on to which the patient is to be transferred and comprises two longish pieces which can be secured against one another, by means of screws or brackets.

9. A device as claimed in any of claims 1 to 8 in which the transferring device is provided with a fastening member and turning tabs by means of which the device may be releasably secured to a frame of the support onto which the patient is to be transferred.

10. A transferring device constructed and arranged substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.